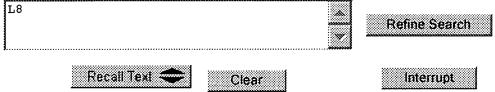
# Refine Search

## Search Results -

Terms	Documents
L7 and wrana.in.	0

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
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IBM Technical Disclosure Bulletins

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# **Search History**

DATE: Friday, May 06, 2005 Printable Copy Create Case

Set Nam side by side	<u>se Query</u> de	Hit Count Set Name result set			
DB=U	JSPT; PLUR=YES; OP=OR				
<u>L8</u>	L7 and wrana.in.	0	<u>L8</u>		
<u>L7</u>	L6 and 15	51	<u>L7</u>		
<u>L6</u>	thomsen.in.	676	<u>L6</u>		
<u>L5</u>	screening method and L4	394742	<u>L5</u>		
<u>L4</u>	L3 and Smurf activity	390287	<u>L4</u>		
<u>L3</u>	11 and L2	43178	<u>L3</u>		
<u>L2</u>	PPXY domain and Smad polypeptide	49936	<u>L2</u>		
<u>L1</u>	smurf activity	390300	<u>L1</u>		

**END OF SEARCH HISTORY** 

# Hit List

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Search Results - Record(s) 1 through 10 of 51 returned.

1. Document ID: US 6846919 B2

L7: Entry 1 of 51 File: USPT Jan 25, 2005

US-PAT-NO: 6846919

DOCUMENT-IDENTIFIER: US 6846919 B2

TITLE: Non-endogenous, constitutively activated human serotonin receptors and small

molecule modulators thereof

DATE-ISSUED: January 25, 2005

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Behan; Dominic P San Diego CA
Chalmers; Derek T Solana Beach CA
Liaw; Chen W San Diego CA
Russo; Joseph F San Diego CA
Thomsen; William J Del Mar CA

 $\text{US-CL-CURRENT: } \underline{536}/\underline{23.1}; \ \underline{435}/\underline{235.1}, \ \underline{435}/\underline{320.1}, \ \underline{435}/\underline{325}, \ \underline{435}/\underline{69.1}, \ \underline{435}/\underline{7.1}, \ \underline{530}/\underline{300},$ 

530/350, 536/23.5

Full Title Citation Front Review Classification Date Reference

2. Document ID: US 6745333 B1

L7: Entry 2 of 51 File: USPT Jun 1, 2004

US-PAT-NO: 6745333

DOCUMENT-IDENTIFIER: US 6745333 B1

TITLE: Method for detecting unauthorized network access by having a NIC monitor for

packets purporting to be from itself

DATE-ISSUED: June 1, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

<u>Thomsen</u>; Brant D. Sandy UT

US-CL-CURRENT: 713/201; 713/160, 713/161, 713/168, 713/200

Full Title Citation Front Review Classification Date Reference

3. Document ID: US 6719968 B2

L7: Entry 3 of 51 File: USPT Apr 13, 2004

US-PAT-NO: 6719968

DOCUMENT-IDENTIFIER: US 6719968 B2

TITLE: Tendon-inducing compositions

DATE-ISSUED: April 13, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Celeste; Anthony J. Hudson MA Hudson MA Wozney; John M. MA Rosen; Vicki A. Brookline MA Wolfman; Neil M. Dover NY Port Jefferson Thomsen; Gerald H. MΑ Melton; Douglas A. Lexington

US-CL-CURRENT:  $\underline{424/85.1}$ ;  $\underline{514/12}$ ,  $\underline{514/2}$ ,  $\underline{530/350}$ ,  $\underline{530/351}$ ,  $\underline{530/395}$ ,  $\underline{530/397}$ ,  $\underline{530/399}$ 

Classification Date Reference	KWIC Draw Deso Ima

4. Document ID: US 6689170 B1

L7: Entry 4 of 51 File: USPT

Feb 10, 2004

US-PAT-NO: 6689170

DOCUMENT-IDENTIFIER: US 6689170 B1

TITLE: Implant element

DATE-ISSUED: February 10, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Larsson; Cecilia S-412 74 Goteborg SE

Thomsen; Peter S-421 67, Goteborg SE

US-CL-CURRENT: 623/23.53; 623/16.11

	tle Citatio	n Front	Review	Classification	Date	Reference			Claims	KWAC	Drawd Desc	ima
						<u> </u>						
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## 5. Document ID: US 6682892 B2

L7: Entry 5 of 51 File: USPT Jan 27, 2004

US-PAT-NO: 6682892

DOCUMENT-IDENTIFIER: US 6682892 B2

TITLE: Method for treating herpes viruses

DATE-ISSUED: January 27, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Homa; Fred L. Kalamazoo MI
Wathen; Michael W. Portage MI
Hopkins; Todd A. Galesburg MI

Thomsen; Darrell R.

Kalamazoo

MI

US-CL-CURRENT: 435/6; 435/235.1, 435/325, 435/5

Full Title Citation Front Review Classification Date Reference Claims KWC Draw Desc Ima

6. Document ID: US 6682649 B1

L7: Entry 6 of 51

File: USPT

Jan 27, 2004

US-PAT-NO: 6682649

DOCUMENT-IDENTIFIER: US 6682649 B1

TITLE: Substrate and a method for determining and/or monitoring electrophysiological

properties of ion channels

DATE-ISSUED: January 27, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Petersen; Jon Wulff DK Lyngby Telleman; Pieter DK Lyngby DK Hansen; Ole Lyngby Ballerup DK Christophersen; Palle DK Bech: Morten Ballerup DK Olesen; Soren Peter Ballerup Due; Jorgen Ballerup DK Ballerup DK Thomsen; Lars

US-CL-CURRENT: 205/777.5; 204/403.01, 422/82.01

SFull | Title | Citation | Front | Review | Classification | Date | Reference | State | State | Claims | KMC | Draw Desc | Ima

7. Document ID: US 6653886 B1

L7: Entry 7 of 51

File: USPT

Nov 25, 2003

US-PAT-NO: 6653886

DOCUMENT-IDENTIFIER: US 6653886 B1

TITLE: Power saving amplifier with selectable current levels

DATE-ISSUED: November 25, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Lee; Wai Laing Austin TX
Kasha; Dan Providence RI
Thomsen; Axel Austin TX

US-CL-CURRENT: 327/374; 327/170, 327/337, 330/9

8. Document ID: US 6639411 B1

L7: Entry 8 of 51 File: USPT Oct 28, 2003

US-PAT-NO: 6639411

DOCUMENT-IDENTIFIER: US 6639411 B1

TITLE: Microactuated suspension motor failure detection system

DATE-ISSUED: October 28, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Thomsen; Jeffrey E. Cosmos MN

US-CL-CURRENT: 324/537; 324/772

Full Title Citation Front	Review Classification D	ate Reference	Claims	KVMC   Drawi Desc   Imag
		······		

9. Document ID: US 6614285 B2

L7: Entry 9 of 51 File: USPT Sep 2, 2003

US-PAT-NO: 6614285

DOCUMENT-IDENTIFIER: US 6614285 B2

TITLE: Switched capacitor integrator having very low power and low distortion and noise

DATE-ISSUED: September 2, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Lee; Wai Laing Austin TX Kasha; Dan Austin TX Thomsen; Axel Austin TX

US-CL-CURRENT: 327/337; 327/374, 330/9, 341/172

Full Title	Citation Front Review	Classification Date Re	ference	Claims	KWMC   Drawn Desc	: ima		
<b>1</b> 0.	Document ID: US 6	5555350 B2						
L7: Entry	10 of 51		File: USPT		Apr 29, 20	03		

US-PAT-NO: 6555350

DOCUMENT-IDENTIFIER: US 6555350 B2

TITLE: Method for processing lignocellulosic material

DATE-ISSUED: April 29, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Ahring; Birgitte Ki.ae butted.r DK-2970 H.o slashed.rsholm DK
Thomsen; Anne Belinda Roskilde DK

Thomsen, Ame berinda Noskiide.

US-CL-CURRENT: 435/162; 435/132, 435/161

Full	Title Citation	Front Review	Classification	Date	Reference				Claims	KANC	Draws	Desc	ima
Cle	ear Ger	nerate Collec	tion   P	rint	Fwd R	efs	Bkwd R	efs	Ge	nerate	OAC	S	
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	Terms				Docum	ents							
	L6 and L5										51		

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NEWS 11 MAR 22 Original IDE display format returns to REGISTRY/ZREGISTRY

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 NEWS 13 MAR 22 REGISTRY/ZREGISTRY enhanced with experimental property tags
 NEWS 14 APR 04 EPFULL enhanced with additional patent information and new
                   fields
 NEWS 15 APR 04 EMBASE - Database reloaded and enhanced
 NEWS 16 APR 18 New CAS Information Use Policies available online
 NEWS 17 APR 25 Patent searching, including current-awareness alerts (SDIs),
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                   may be affected by a change in filing date for U.S.
                   applications.
                   Improved searching of U.S. Patent Classifications for
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                   U.S. patent records in CA/CAplus
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L1 4 PPXY DOMAIN

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L1 ANSWER 1 OF 4 MEDLINE on STN

TI Enac degradation in A6 cells by the ubiquitin-proteosome proteolytic pathway.

Amiloride-sensitive epithelial Na(+) channels (ENaC) are responsible for AB trans-epithelial Na(+) transport in the kidney, lung, and colon. The channel consists of three subunits (alpha, beta, gamma) each containing a proline rich region (PPXY) in their carboxyl-terminal end. Mutations in this PPXY domain cause Liddle's syndrome, an autosomal dominant, salt-sensitive hypertension, by preventing the channel's interactions with the ubiquitin ligase Neural precursor cell-expressed developmentally down-regulated protein (Nedd4). It is postulated that this results in defective endocytosis and lysosomal degradation of ENaC leading to an increase in ENaC activity. To show the pathway that degrades ENaC in epithelial cells that express functioning ENaC channels, we used inhibitors of the proteosome and measured sodium channel activity. We found that the inhibitor, MG-132, increases amiloride-sensitive trans-epithelial current in Xenopus distal nephron A6 cells. There also is an increase of total cellular as well as membrane-associated ENaC subunit molecules by Western blotting. MG-132-treated cells also have increased channel density in patch clamp experiments. Inhibitors of lysosomal function did not reproduce these findings. Our results suggest that in native renal cells the proteosomal pathway is an important regulator of ENaC function.

ACCESSION NUMBER: 2001308612 MEDLINE

DOCUMENT NUMBER: PubMed ID: 11278712

TITLE: Enac degradation in A6 cells by the ubiquitin-proteosome

proteolytic pathway.

AUTHOR: Malik B; Schlanger L; Al-Khalili O; Bao H F; Yue G; Price S

R; Mitch W E; Eaton D C

CORPORATE SOURCE: Department of Physiology and Renal Division, Emory

University, Atlanta, Georgia 30322, USA...

bmalik@ccms-renal.physio.emory.edu

CONTRACT NUMBER: DK 37963-14 (NIDDK)

DK-37175 (NIDDK)
DK-50268-4 (NIDDK)
DK-50740 (NIDDK)

SOURCE: Journal of biological chemistry, (2001 Apr 20) 276 (16)

12903-10. Electronic Publication: 2001-01-26.

Journal code: 2985121R. ISSN: 0021-9258.

United States PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

LANGUAGE: English

Priority Journals FILE SEGMENT:

200105 ENTRY MONTH:

Entered STN: 20010604 ENTRY DATE:

> Last Updated on STN: 20030105 Entered Medline: 20010531

ANSWER 2 OF 4 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. L1 on STN

ENaC Degradation in A6 Cells by the Ubiquitin-Proteosome Proteolytic TI ·

Amiloride-sensitive epithelial Na(+) channels (ENaC) are responsible for AB trans-epithelial Na(+) transport in the kidney, lung, and colon. channel consists of three subunits  $(\alpha, \beta, \gamma)$  each containing a proline rich region (PPXY) in their carboxyl-terminal end. Mutations in this PPXY domain cause Liddle's syndrome, an autosomal dominant, salt-sensitive hypertension, by preventing the channel's interactions with the ubiquitin ligase Neural precursor cell-expressed developmentally down-regulated protein (Nedd4). It is postulated that this results in defective endocytosis and lysosomal degradation of ENaC leading to an increase in ENaC activity. To show the pathway that degrades ENaC in epithelial cells that express functioning ENaC channels, we used inhibitors of the proteosome and measured sodium channel activity. We found that the inhibitor, MG-132, increases amiloride-sensitive trans-epithelial current in Xenopus distal nephron A6 cells. There also is an increase of total cellular as well as membrane-associated ENaC subunit molecules by Western blotting. MG-132-treated cells also have increased channel density in patch clamp experiments. Inhibitors of lysosomal function did not reproduce these

findings. Our results suggest that in native renal cells the proteosomal

pathway is an important regulator of ENaC function.

2003459568 EMBASE ACCESSION NUMBER:

ENaC Degradation in A6 Cells by the Ubiquitin-Proteosome TITLE:

Proteolytic Pathway.

Malik B.; Schlanger L.; Al-Khalili O.; Bao H.-F.; Yue G.; AUTHOR:

Price S.R.; Mitch W.E.; Eaton D.C.

B. Malik, Dept. of Physiology, Ctr. for Cell and Molec. CORPORATE SOURCE:

Signaling, Physiology Bldg., 1648 Pierce Dr., Atlanta, GA 30322, United States. bmalik@ccms-renal.physio.emory.edu Journal of Biological Chemistry, (20 Apr 2001) Vol. 276,

No. 16, pp. 12903-12910.

Refs: 28

ISSN: 0021-9258 CODEN: JBCHA3

United States COUNTRY: DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 005 General Pathology and Pathological Anatomy

> 022 Human Genetics

029 Clinical Biochemistry

LANGUAGE: English SUMMARY LANGUAGE: English

SOURCE:

Entered STN: 20031204 ENTRY DATE:

Last Updated on STN: 20031204

L1ANSWER 3 OF 4 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

Novel isolated Smurf protein useful for inhibiting bone morphogenic тT protein or tumor growth factor-beta activation pathway, for treating cancer and to block osteogenesis, hair growth, tooth formation.

2001-071267 [08] WPIDS AN

AB WO 200077168 A UPAB: 20011129

NOVELTY - An isolated Smurfl or Smurf2 protein (I), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated nucleic acid (II) encoding (I);
- (2) a vector (III) comprising (II);
- (3) a host cell (IV) comprising (III);

- (4) production of (I);
- (5) a transgenic non-human animal that expresses a human (I);
- (6) screening (M) for a modulator of Smurf activity, comprising detecting modulation of Smurf activity in the presence of a test compound relative to Smurf activity in the absence of the test compound;
  - (7) an antibody (V) that specifically binds to (I);
- (8) an oligonucleotide or nucleic acid (VI) that specifically hybridizes to (II) under highly stringent conditions; and
- (9) promoting a bone morphogenic protein or transforming growth factor (TGF) beta activation pathway in a cell, comprising suppressing expression of endogenous Smurf in the cell.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - Negative regulator of Smad signal transduction; antagonist of BMP and TGF- beta signaling pathway.

The inhibition of Smad1 by Smurf1 was tested. By over expressing Smad1 and Smad2 together with various dosages of Smurf1 in Xenopus animal caps, the ability of Smurf1 to directly antagonize the mesoderm induction activities of Smad1 and Smad2, was tested. The results showed that expression of Smad1 alone induced ventral mesoderm, as demonstrated by expression of the ventral/posterior mesodermal markers Xhox3 and Xcad1. However, co-expression of Smurf1 and Smad1 blocked induction of these markers at all Smurf1 doses tested, demonstrating that Smurf1 can antagonize Smad1 activity.

USE - Expression of (I) from (III) in a cell is useful for inhibiting a bone morphogenic protein (BMP) or transforming growth factor- beta (TGF beta ) activation pathway in a cell (claimed). (I) is useful to block chondrogenesis, osteogenesis, blood differentiation, cartilage formation, neural tube patterning, retinal development, heart induction and morphogenesis, hair growth, tooth formation, gamete formation and a wide variety of tissue and organ formation processes, and hinder the regeneration, growth, maintenance, etc., of bone and other tissues that are dependent on the BMP pathway. (I) is useful for screening for various drugs and/or antibodies that can either enhance the BMP pathway, or inhibit it by antagonizing or mimicking the activity of (I), respectively, and in screening assays for identifying specific ligands of (I). (I) is useful as an immunogen to generate antibodies that are useful to alter the BMP pathway by inhibiting (I) or for diagnostic purposes. (I) is useful for treating a disorder associated with BMP or TGF- beta activation, such as cancer. (I) or inhibitor of (I) can be delivered by a vector to modulate Smads, e.g. to prevent Smurf regulation of Smads where BMP or TGF beta activity is desired, such as in bone regeneration or to study Smurf regulator processes in vivo.

Dwg.0/18

ACCESSION NUMBER: 2001-071267 [08] WPIDS

DOC. NO. CPI: C2001-019969

TITLE: Novel isolated Smurf protein useful for inhibiting bone

morphogenic protein or tumor growth factor-beta

activation pathway, for treating cancer and to block

osteogenesis, hair growth, tooth formation.

DERWENT CLASS: B04 D16

INVENTOR(S): THOMSEN, G H; WRANA, J

PATENT ASSIGNEE(S): (HSCR-N) HSC RES & DEV LP; (UYNY) UNIV NEW YORK STATE RES

FOUND

COUNTRY COUNT: 93

PATENT INFORMATION:

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PATENT NO KIND DATE WEEK LA PG
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WO 2000077168 A2 20001221 (200108) \* EN 106

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000056107 A 20010102 (200121)

EP 1192174 A2 20020403 (200230) EN

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT

RO SE SI

JP 2003502064 W 20030121 (200308) 131

CN 1409722 A 20030409 (200345)

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000077168	A2	WO 2000-US16250	20000612
AU 2000056107	Α	AU 2000-56107	20000612
EP 1192174	A2	EP 2000-941398	20000612
		WO 2000-US16250	20000612
JP 2003502064	W	WO 2000-US16250	20000612
	•	JP 2001-504003	20000612
CN 1409722	A	CN 2000-811354	20000612

## FILING DETAILS:

PATENT NO	KIND	PATENT NO				
AU 2000056107	A Based on	WO 2000077168				
EP 1192174	A2 Based on	WO 2000077168				
TP 2003502064	W Based on	WO 2000077168				

PRIORITY APPLN. INFO: US 1999-138969P 19990611

L1 ANSWER 4 OF 4 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN ENaC degradation in A6 cells by the ubiquitin-proteosome proteolytic

AB Amiloride-sensitive epithelial Na+ channels (ENaC) are responsible for trans-epithelial Na+ transport in the kidney, lung, and colon. The channel consists of three subunits (alpha, beta, gamma) each containing a proline rich region (PPXY) in their carboxyl-terminal end. Mutations in this PPXY domain cause Liddle's syndrome, an autosomal dominant, salt-sensitive hypertension, by preventing the channel's interactions with the ubiquitin ligase Neural precursor cell-expressed developmentally down-regulated protein (Nedd4). It is postulated that this results in defective endocytosis and lysosomal degradation of ENaC leading to an increase in ENaC activity. To show the pathway that degrades ENaC in epithelial cells that express functioning ENaC channels, we used inhibitors of the proteosome and measured sodium channel activity. We found that the inhibitor, MG-132, increases amiloride-sensitive trans-epithelial current in Xenopus distal nephron A6 cells. There also is an increase of total cellular as well as membrane-associated ENaC subunit molecules by Western blotting. MG-132-treated cells also have increased channel density in patch clamp experiments. Inhibitors of lysosomal function did not reproduce these findings. Our results suggest that in native renal cells the proteosomal pathway is an important

regulator of ENaC function.
ACCESSION NUMBER: 2001:301269 BIOSIS
DOCUMENT NUMBER: PREV200100301269

TITLE: ENaC degradation in A6 cells by the ubiquitin-proteosome

proteolytic pathway.

AUTHOR(S): Malik, Bela [Reprint author]; Schlanger, Lynn; Al-Khalili,

Otor; Bao, Hui-Fang; Yue, Guichun; Price, Stephen Russ;

Mitch, William E.; Eaton, Douglas Charles

CORPORATE SOURCE: Dept. of Physiology, Center for Cell and Molecular

Signaling, 1648 Pierce Dr., Physiology Bldg., Rm. 074,

Atlanta, GA, 30322, USA

bmalik@ccms-renal.physio.emory.edu

SOURCE: Journal of Biological Chemistry, (April 20, 2001) Vol. 276,

No. 16, pp. 12903-12910. print. CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 27 Jun 2001

Last Updated on STN: 19 Feb 2002

```
=> s Smad polypeptide
           65 SMAD POLYPEPTIDE
=> s 12 and Smurf activity
             0 L2 AND SMURF ACTIVITY
=> s smurf activity
             1 SMURF ACTIVITY
=> d l4 ti abs ibib tot
    ANSWER 1 OF 1 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
    Novel isolated Smurf protein useful for inhibiting bone morphogenic
    protein or tumor growth factor-beta activation pathway, for treating
    cancer and to block osteogenesis, hair growth, tooth formation.
     2001-071267 [08]
                        WPIDS
ΑN
    WO 200077168 A UPAB: 20011129
AΒ
    NOVELTY - An isolated Smurfl or Smurf2 protein (I), is new.
          DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
     following:
          (1) an isolated nucleic acid (II) encoding (I);
          (2) a vector (III) comprising (II);
          (3) a host cell (IV) comprising (III);
          (4) production of (I);
          (5) a transgenic non-human animal that expresses a human (I);
          (6) screening (M) for a modulator of Smurf activity
     , comprising detecting modulation of Smurf activity in
     the presence of a test compound relative to Smurf
     activity in the absence of the test compound;
          (7) an antibody (V) that specifically binds to (I);
          (8) an oligonucleotide or nucleic acid (VI) that specifically
     hybridizes to (II) under highly stringent conditions; and
          (9) promoting a bone morphogenic protein or transforming growth
     factor (TGF) - beta activation pathway in a cell, comprising suppressing
     expression of endogenous Smurf in the cell.
          ACTIVITY - Cytostatic.
     antagonist of BMP and TGF- beta signaling pathway.
```

MECHANISM OF ACTION - Negative regulator of Smad signal transduction;

The inhibition of Smadl by Smurfl was tested. By over expressing Smad1 and Smad2 together with various dosages of Smurf1 in Xenopus animal caps, the ability of Smurf1 to directly antagonize the mesoderm induction activities of Smad1 and Smad2, was tested. The results showed that expression of Smadl alone induced ventral mesoderm, as demonstrated by expression of the ventral/posterior mesodermal markers Xhox3 and Xcad1. However, co-expression of Smurfl and Smadl blocked induction of these markers at all Smurf1 doses tested, demonstrating that Smurf1 can antagonize Smadl activity.

USE - Expression of (I) from (III) in a cell is useful for inhibiting a bone morphogenic protein (BMP) or transforming growth factor- beta (TGF beta ) activation pathway in a cell (claimed). (I) is useful to block chondrogenesis, osteogenesis, blood differentiation, cartilage formation, neural tube patterning, retinal development, heart induction and morphogenesis, hair growth, tooth formation, gamete formation and a wide variety of tissue and organ formation processes, and hinder the regeneration, growth, maintenance, etc., of bone and other tissues that are dependent on the BMP pathway. (I) is useful for screening for various drugs and/or antibodies that can either enhance the BMP pathway, or inhibit it by antagonizing or mimicking the activity of (I), respectively, and in screening assays for identifying specific ligands of (I). (I) is useful as an immunogen to generate antibodies that are useful to alter the BMP pathway by inhibiting (I) or for diagnostic purposes. (I) is useful for treating a disorder associated with BMP or TGF- beta activation, such as cancer. (I) or inhibitor of (I) can be delivered by a vector to modulate Smads, e.g. to prevent Smurf regulation of Smads where BMP or TGF beta activity is desired, such as in bone regeneration or to study Smurf regulator processes in vivo.

WPIDS ACCESSION NUMBER: 2001-071267 [08]

C2001-019969 DOC. NO. CPI:

Novel isolated Smurf protein useful for inhibiting bone TITLE:

morphogenic protein or tumor growth factor-beta

activation pathway, for treating cancer and to block

osteogenesis, hair growth, tooth formation.

B04 D16 DERWENT CLASS:

THOMSEN, G H; WRANA, J INVENTOR (S):

(HSCR-N) HSC RES & DEV LP; (UYNY) UNIV NEW YORK STATE RES PATENT ASSIGNEE(S):

FOUND

93 COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA PG

A2 20001221 (200108) \* EN 106 WO 2000077168

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ

NL OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT

LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL

TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000056107 A 20010102 (200121) A2 20020403 (200230) EN EP 1192174

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT

RO SE SI

JP 2003502064 W 20030121 (200308) 131

A 20030409 (200345) CN 1409722

#### APPLICATION DETAILS:

PATE	ON TN	KIND	ΑI	PLICATION	DATE
WO 2	 000077168	A2	WO	2000-US16250	20000612
AU 2	000056107	A	ΑU	2000-56107	20000612
EP 1	192174	A2	ΕP	2000-941398	20000612
			WO	2000-US16250	20000612
JP 20	003502064	W	WO	2000-US16250	20000612
			JΡ	2001-504003	20000612
CN 14	409722	A	CN	2000-811354	20000612
		-	WO JP	2000-US16250 2001-504003	2000061 2000061

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000056107	A Based on	WO 2000077168
EP 1192174 JP 2003502064	A2 Based on W Based on	WO 2000077168 WO 2000077168
JP Z003502064	w baseu on	WO 2000011100

PRIORITY APPLN. INFO: US 1999-138969P 19990611

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E1	2	THOMSEN ZIEGER N/AU
E2	4	THOMSEN ZIEGER NADINE/AU
E3	0>	THOMSEN, G/AU
E4	1	THOMSENE T/AU
<b>E</b> 5	1	THOMSENK/AU
E6	1	THOMSENS P/AU
<b>E</b> 7	12	THOMSER J/AU
E8	1	THOMSERN J B/AU
E9	2	THOMSETT A/AU
E10	1	THOMSETT C E/AU
E11	1	THOMSETT D W/AU
E12	1	THOMSETT E C/AU

=> e wrana, j/au

WRANA M/AU E1

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E3	0>	WRANA,J/AU
E4	1	WRANAWIN K/AU
E5	1	WRANCE O/AU
E6	1	WRANCKEN A/AU
E7	1	WRANEK J/AU
E8	1	WRANEK P/AU
E9	41	WRANEK U/AU
E10	3	WRANEK URSULA/AU
E11	2	WRANELL L/AU
E12	3	WRANES E/AU